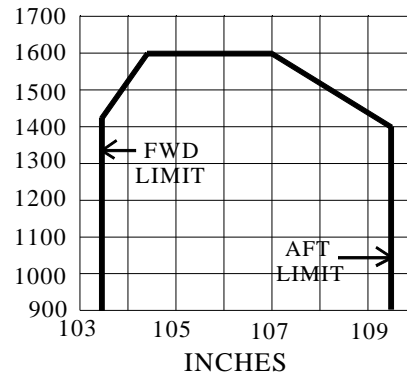




C.G. range (+104.4) to (+107.0) at 1600 lb.  
 (+103.4) at 1445 lb.  
 (+109.5) at 1415 lb.



Empty wt. C.G. range	None
Maximum weight	1600 lb.
No. of seats	2 (+85)
Maximum baggage	50 lb. (+140)
Fuel capacity	31 gal. (+114) (includes 0.5 gal. unusable fuel)
Oil capacity	7.3 qt. (+108) (includes 2.6 qt. unusable oil) See NOTE 1 for undrainable oil.
Rotor blades and control movements	For rigging information refer to Maintenance Manual.
Serial Nos. eligible	4 thru 300. (S/N 33 and up manufactured under Production Certificate No. 204).

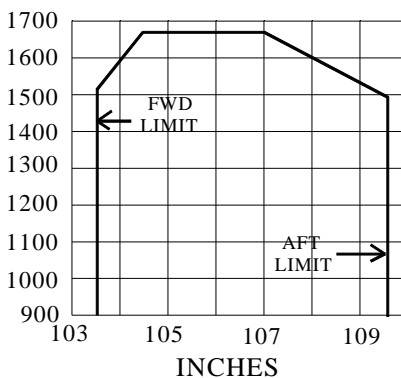
## **II - Model B-2A, 2 PCLM (Normal Category), Approved December 21, 1962**

Engine	Lycoming VO-360-A1B or VO-360-B1A	
Fuel	91/96 minimum grade aviation gasoline	
Engine limits	For all operations, 2900 r.p.m. (180 h.p.) sea level	
Carburetor and carburetor setting	Marvel Schebler MA4-5 (Setting No. 10-3634) or Marvel Schebler MA4-5AA (Setting No. 10-4495)	
Rotor limits and operational engine speeds	<u>Power Off (Rotor Tach)</u> Maximum 472 r.p.m. Minimum 400 r.p.m.	<u>Power On (Engine Tach)</u> Maximum 2900 r.p.m. Minimum 2700 r.p.m.
Airspeed limits	Never exceed speed 100 m.p.h. (87 knots) CAS from S.L. to 2,000 ft. Above 2,000 ft. decrease $V_{ne}$ 3 m.p.h. per 1,000 ft.	
C.G. range	(+104.4) to (+107.0) at 1600 lb. (+103.4) at 1445 lb. (+109.5) at 1415 lb. See diagram Section I	

Empty wt. C.G. range	None
Maximum weight	1600 lb.
No. of seats	2 (+85)
Maximum baggage	50 lb. (+140)
Fuel capacity	31 gal. (+114) (including 0.5 gal. unusable fuel)
Oil capacity	7.3 qt. (+108) (including 2.6 qt. unusable oil) See NOTE 1 for undrainable oil.
Rotor blade and control movements	For rigging information refer to Maintenance Manual.
Serial Nos. Eligible	301 thru 318 (Model B-2, S/N 4 thru 300 eligible when modified per Brantly Helicopter Drawing List Revision X, Supplement C). Manufactured under Production Certificate No. 204.

### **III - Model B-2B, 2 PCLM (Normal Category), Approved July 1, 1963**

Engine	Lycoming IVO-360-A1A						
Fuel	91/96 minimum grade aviation gasoline						
Engine limits	For all operations, 2900 r.p.m. (180 h.p.) sea level						
Injector and injector setting	Bendix fuel injector RSA-5AD1 with servo regulator parts listing 2524171-1						
Rotor limits and operational engine limits	<table> <tr> <td><u>Power Off (Rotor Tach)</u></td> <td><u>Power On (Engine Tach)</u></td> </tr> <tr> <td>Maximum 472 r.p.m.</td> <td>Maximum 2900 r.p.m.</td> </tr> <tr> <td>Minimum 400 r.p.m.</td> <td>Minimum 2700 r.p.m.</td> </tr> </table>	<u>Power Off (Rotor Tach)</u>	<u>Power On (Engine Tach)</u>	Maximum 472 r.p.m.	Maximum 2900 r.p.m.	Minimum 400 r.p.m.	Minimum 2700 r.p.m.
<u>Power Off (Rotor Tach)</u>	<u>Power On (Engine Tach)</u>						
Maximum 472 r.p.m.	Maximum 2900 r.p.m.						
Minimum 400 r.p.m.	Minimum 2700 r.p.m.						
Airspeed limits	Never exceed speed 100 m.p.h. (87 knots) CAS from S.L. to 2,000 ft. Above 2,000 ft. decrease $V_{ne}$ 3 m.p.h. per 1,000 ft.						
C.G. range	(+104.3) to (+107.0) at 1670 lb. (+103.4) at 1535 lb. (+109.5) at 1500 lb.						



Empty wt. C.G. range	None
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Maximum weight	1670 lb. (See NOTE 5)
No. of seats	2 (+85)
Maximum baggage	50 lb. (+140)
Fuel capacity	31 gal. (+114) (includes 0.5 gal. unusable fuel)
Oil capacity	7.3 qt. (+108) (includes 2.6 qt. unusable oil) See NOTE 1 for undrainable oil.
Rotor blades and control movements	For rigging information refer to Maintenance Manual or Brantly flight controls rigging specification number BV-P-025.
Serial Nos. eligible	Serial numbers 319 thru 478. (Model B-2A, S/N 4 thru 318 eligible when modified per Brantly Helicopter Drawing List Revision X, Supplement C). Manufactured under Production Certificate No. 204.  Serial numbers 479 thru 483 manufactured under Learjet's production certificate.  Serial numbers 2001, 2004, and 2006 manufactured by Brantly Helicopter Industries U.S.A. Co., Ltd.  Serial numbers 2002, 2003, 2005, 2007, and subsequent manufactured by Brantly International, Inc.

#### **Data Pertinent to All Models**

Datum	100 inches forward of forward firewall
Leveling means	Front seat support - lateral Tail rotor drive shaft - longitudinal
Certification basis	Part 6 of the Civil Air Regulations effective December 20, 1956, as amended by 6-2. Type Certificate No. 2H2 issued April 27, 1959. Application for Type Certificate dated February 28, 1957.
Production basis	Serial numbers 2002, 2003, 2007, and subsequent, Production Certificate No. PC10SW is applicable.  Serial numbers 2001, 2004, 2005, and 2006 none. Prior to the original certification of each helicopter an FAA representative performed a detailed inspection for workmanship, materials, and conformity with approved technical data, and a check of flight characteristics.  Serial numbers 479 through 483 manufactured under Learjet's production certificate.  Serial numbers 319 through 478 manufactured under Production Certificate No. 204.
Equipment	The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification basis) must be installed in the aircraft for certification. In addition, the following items of equipment are required:  B-2, FAA Approved Helicopter Flight Manual dated April 27, 1959, or February 15, 1962. B-2A, FAA Approved Helicopter Flight Manual dated December 21, 1962. B-2B, FAA Approved Helicopter Flight Manual dated June 24, 1963.

NOTE 1. Current weight and balance report together with list of equipment included in certificated empty weight, and loading instructions when necessary, must be provided for each helicopter at the time of original certification.

The certificated empty weight and corresponding center of gravity locations must include undrainable oil of 2.5 lb. at (+108) and unusable fuel at 3 lb. at (+103).

NOTE 2. The following placard must be installed in full view of the pilots:

"This helicopter must be operated in compliance with the operating limitations specified in the FAA Approved Helicopter Flight Manual."

"Heater must be turned off during hovering."

NOTE 3. Information essential to the proper maintenance of the helicopter is contained in the Maintenance Manual provided with each helicopter which specifies that service life limited parts shall be retired according to the following schedules:

<u>MODEL B-2</u>		
	<u>PART NO.</u>	<u>HOURS</u>
<u>Main Rotor System</u>		
Outboard main rotor blades (except spar assy. 248-45)	248-40	500
Outboard main rotor blades (except spar assy. 248-45)	248-46	500
Outboard main rotor blade	248-53	2500
Outboard main rotor blade	248-100	2500
Outboard main rotor blade	248-101, 248-202, & 248-404	2500
Lag hinge block	4-1	2500
Lag hinge block	4-12	2500
Hub and Pylon assy. (when used with outboard blades 248-40)	333	2500
Control tube assy. main rotor (when used with outboard blades P/N 248-40)	305-2	1310
Control tube assy. main rotor (when used with outboard blades P/N 248-46, 248-53, 248-100, 248-101, 248-202 & 248-404)	305-2	2500
Inboard yoke	280-4	2500
Hub and inboard blade assy.	305-1	2500
Pylon outboard bearing shaft	280-5 & 280-6	500
Pylon outboard bearing shaft	280-7	1200
<u>Drive System</u>		
Transmission assy.	324	3250
Free wheeling clutch assy.	10-11	2500
Free wheeling clutch cage	10-2	300
Overrunning clutch (Formsprag)	CL-40237, -1	2500
Drive shaft extension assy.	108-33	3250
Intermediate gear box assy	278-100	3250
Tail rotor gear box assy	278-200	3250

Model B-2A and B-2BMain Rotor System

Outboard main rotor blades (Model B-2A & B-2B)	248-101	2500
See Note 5 for weight limitations	248-202	2500
	248-404	2500
Lag Hinge Block	4-12	2500
Main Rotor Hub	332-1	2500
Hub Straps	332-3	2500
Bolts	332-6	2500
Clevis	332-2	2500
Pylon Flanges	160-3	2500
Pylon Tubes	160-5	2500
Pylon Outboard Bearing Shaft	280-7	1200
Bearing Shaft Nut	5-5	2500
Inboard Blades	202-15	2500
Inboard Yoke	280-4	2500
Universal Joint Assembly	342-7	2500
Hub & Inboard Blade Assembly	305-1	2500
Pylon Outboard Bearing Shaft	280-6	500

Drive System

Transmission Assembly	324	3250
Overrunning Clutch (Formsprag)	CL-40237-2, -3	2500
Drive Shaft Extension Assembly	108-33	3250
Intermediate Gear Box Assembly	278-100	3250
Tail Rotor Gear Box Assembly	278-200	3250
Morflex Coupling (Fwd.)		3250
Morflex Coupling (Aft)		3250
Free Wheeling Clutch Assembly	10-11	2500
Free Wheeling Clutch Cage	10-2	300

NOTE 4.

Models B-2 and B-2A

Transmission upper cases with mount lugs 1/4 in. thick are ineligible unless reinforced by bracket P/N 151-19 installed in accordance with Brantly Service Bulletin No. 14. These cases may be identified by P/N Stamp 104-2, Revision B, and by part serial numbers 1 thru 122.

NOTE 5.

Weight limitations, maximum approved gross weight for B-2B;  
with 248-202 or -404 main rotor blades - 1670 lb.  
with 248-101 main rotor blades - 1600 lb.

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